

REMARKS/ARGUMENTS

Initially, Applicant would like to remind the Examiner that an interview has been requested in this case. Therefore, the Examiner is requested to please kindly call the Applicant's representative at the number provided below so an interview may be conducted before the Examiner acts upon this response. Reconsideration of the application is respectfully requested for the following reasons:

Claims 55-57 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yano et al. (U.S. Patent No. 5,747,800) in view of Gregory et al. (WO 98/50941) in further view of Weinberger (U.S. Patent No. 6,294,760). As noted in the action, in a personal interview conducted March 25, 2004, the Examiner had indicated that claims 55 and 77 are not obvious over Yano et al. in view of Gregory. Apparently, the Examiner has reconsidered his position and now rejects these claims. As the Examiner correctly points out in his rejection, neither Yano et al. nor Gregory teach the limitation of regularly switching back and forth between a first high sensitivity mode and a second low sensitivity mode. However, the Examiner alleges that "such an operation mode is generally known in the art, and represents a mere matter of design choice." (See page 4, lines 7 and 9 of the Office Action.) The Examiner then specifically quotes Weinberger from column 13, lines 65-67 and column 14, lines 1-10 the particular wording "the forward trajectory SCPG detector can be automatically **toggled between high resolution and high molecular weight/enhanced sensitivity modes** by providing electronic or mechanical **switching** or voltage generation means to alter the aforementioned potentials depending on **desired** mode of operation" (emphasis in Examiner's action). Apparently, the Examiner is of the position that the words "toggled" and "switching" is understood in the art as being the same as the Applicant's "switching back and forth" limitation. This rejection is respectfully traversed. **The Weinberger reference is actually disclosing switching depending on a desired mode of operation rather than having a mode of operation in which sensitivity is regularly switched back and forth.**

Both the Yano et al. and Gregory references relate to systems in which a feed back loop controls an ion lens such that the number of ions entering the mass analyzer or detector can be regulated. In Yano et al., the focusing condition of the lens is controlled in order to ensure the allowable amount of ions capable of existing in the 3D ion trap's base is not exceeded. In Gregory, the steering lens deflects the ion beam in order to control the fraction of ion beam incident on the detector and thereby prevent overload of the electron multiplier by excessive ion intensity. Limiting the intensity range of the incident ion beam to within the dynamic range of the detector allows the dynamic range of the spectrometer to be increased relative to that of the detector. Neither reference disclose an operation in which the ion lens is regularly switched back and forth between two sensitivity modes, as recited in dependent claims 55 and 77.

Weinberger does not add anything to the disclosure of Yano et al. or Gregory. Weinberger is concerned with switching a secondary ion generator detector for a time of flight/mass spectrometer between sensitivity modes depending on whether a high resolution measurement or sensitivity to high molecular weight is required. There is no teaching that the detector should be used in a mode of operation where it is regularly switched back and forth between sensitivity modes. Rather, the desired mode of operation is one of a particular sensitivity. Applicant respectfully submits that the Examiner has misinterpreted the wording "the forward trajectory SCPG detector can be automatically toggled between high resolution and high molecular weight/enhanced sensitivity modes by providing electronic or mechanical switching or voltage generation means to alter the aforementioned potentials depending on desired mode of operation" (emphasis in Examiner's action). Such wording can not reasonably be interpreted to switching back and forth between two sensitivity modes. Further, there is no reason why means for switching the sensitivity mode of a detector should be applied to switching the focusing condition of a lens arranged upstream of a mass analyzer.

In summary, the prior art does not disclose nor render obvious an ion lens that is regularly switched back and forth between two sensitivity modes as recited in independent claims 55 and 77 and therefore, all the claims in this case should be considered allowable and the case pass to issue.

If the Examiner should have any additional concerns regarding the allowance of this application, he is cordially invited to contact the undersigned at the number provided below to further expedite the prosecution.

Respectfully submitted,



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